

REMARKS

Claims 1-9, 13-21 and 25-28 are pending. Claims 1, 2, 13 and 14 are amended. These amendments are supported by at least Figs. 2 and 5 and corresponding portion of the specification.

Applicants thank Examiner Parries and Supervisory Examiner Sherry for the courtesies extended to Applicants' representative, Mr. Paul Tsou, during the November 1 personal interview. The substance of the personal interview is incorporated in the remarks below.

Entry of the amendments to claims 1, 2, 13 and 14 is proper under 37 CFR §1.116 because the amendments: a) place the application in condition for allowance (for all the reasons discussed herein); b) do not raise any new issues requiring further search or consideration; and c) place the application in better form for appeal (if necessary). Accordingly, entry is proper under 37 CFR §1.116.

The Office Action rejects claims 1, 5, 9, 13, 17, 21, 25 and 27 under 35 U.S.C. §103 over Clark et al. (U.S. Patent No. 5,913,691) and Olarig et al. (U.S. Patent No. 6,587,909); claims 2, 6, 14 and 18 under 35 U.S.C. §103 over Clark in view of Olarig and further in view of Heberlein et al. (U.S. Patent No. 6,361,356); claims 3, 7, 15, 19, 26 and 28 under 35 U.S.C. §103 over Clark, in view of Olarig and further in view of Saitoh et al. (U.S. Patent No. 5,274,722); and claims 4, 8, 16 and 20 under 35 U.S.C. §103(a) over Clark, in view of Olarig and Heberlein and further in view of Saitoh. These rejections are respectfully traversed.

The Office Action asserts that Clark teaches a changing means that includes control circuit 70 and that Olarig teaches a changing means that includes CPU 12. Further, the Office Action asserts that it would have been obvious to combine Clark and Olarig "so that the connection and disconnection of external equipment in Clark's invention can be done as

safely as possible to minimize the possibility of an electrocution or shock." However, as discussed in detail in the May 25, 2007 Amendment, Olarig does not disclose or suggest anything regarding safety or electrocution and Clark does not disclose or suggest anything regarding electrocution. In fact, Clark at C6/L3 explicitly discloses heating and erosion at points of electrical contact as the reason for providing control circuit 70. Thus, contrary to the Office Action's assertion, one of ordinary skill in the art would not have been motivated by anything in Olarig to modify Clark.

During the interview, the Examiners asserted that increased reliability and safety may be an additional motivation. However, Applicants respectfully submit that adding a CPU does not further improve either reliability or safety.

Clark already includes power circuit 70 which is a simple switch connected in a wire harness. As is well known in the art, a CPU is a complex logic device and has a much higher failure rate than a switch, thus adding a CPU does not improve reliability. Further, Clark discloses that power circuit 70 is physically offset so that power circuit is switched on after connectors connect or switched off before connectors disconnect. See C5/L62-C6/L19. Thus, power circuit 70 ensures safety and a CPU does not further improve safety. On the contrary, adding the CPU in the operation of power circuit 70 only decreases reliability and increases cost without any additional benefits. One of ordinary skill in the art would not have been motivated to add the CPU in the power circuit operation. This combination is completely by hindsight reconstruction.

In any case, Clark does not disclose or suggest a CPU, as recited in claims 1 and 13. The power circuit 70 is not a controller but rather wires that may be weaved "in and out of various devices" that switches a power supply on and off. See C6/L6-8 and 13-16. Thus, Clark's power circuit 70 is wires connected to an ON/OFF switch, not a CPU, as recited in claims 1 and 13.

Olarig is directed to preventing rebooting of a CPU. Even though the Office Action explicitly asserts that the only teaching from Olarig applied to Clark is "when the state of electrical connection between a main device and a piece of external equipment changes" (see Office Action, page 3, lines 5-6), during the interview, this assertion was retracted and a CPU was asserted to be either "inherent" or already provided in Clark's electrically-powered vehicles. However, even if a CPU is in an electric vehicle, there is nothing that would have motivated one of ordinary skill to involve the CPU in the connector disclosed in Clark, as discussed above.

Further, the Office Action explicitly states that "the fact that Olarig sends a signal to the computer to proceed where the memory stabilization, system configuration, and power are controlled to operate is moot, since these teachings are NOT being modified into Clark's (the main reference) invention." Office Action, page 3, lines 6-9. Without this signal, Olarig's CPU becomes irrelevant. Thus, the combination of Clark in view of Olarig does not include a controller which is explicitly recited in claims 1 and 13. Accordingly, Clark and Olarig even if combined (properly or improperly) do not include all the limitations recited in claims 1 and 13. Accordingly, Clark and Olarig individually or in combination would not have rendered obvious the subject matter recited in claims 1 and 13.

Moreover, even if for argument sake, the CPU is somehow connected, Clark and Olarig do not disclose or suggest the interlock control circuit controlled by the CPU, or changing the state of a high voltage supply prior to any movement of the connector means/unit as recited in claims 1 and 13.

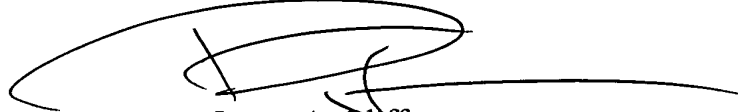
Heberlein and Saitoh do not supply the subject matter lacking in Clark or Olarig. Thus, Clark, Olarig, Heberlein and Saitoh individually or in combination do not disclose or suggest the subject matter recited in claims 1 and 13. Claims 2-9, 25 and 26 depend from claim 1 and claims 14-21, 27 and 28 depend from claim 13. Thus, the applied references

individually or in combination would not have rendered obvious the subject matter recited in claims 1-9, 13-21, 25, 26, 27 and 28. Withdrawal of the rejections of claims 1-9, 13-21, 25, 26, 27 and 28 is respectfully solicited.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-9, 13-21, 25, 26, 27 and 28 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,



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